ISRAEL AEROSPACE INDUSTRIES

LAHAV DIVISION

LAHAV - Advanced Multi-role Fighters Manufacture

Aircraft Manufacturer

Avionics system development & integration

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LAHAV DIVISION

- Comprehensive Military Aircraft manufacture & upgrade Capabilities
- Designer & Manufacturer of Kfir Aircraft
- Supplier of advanced systems to IDF
- Data Link on all IAF fighters
- Advanced systems & weapons Development & Integration

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LAHAV EXPERTISE – AIRCRAFT

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HELICOPTER UPGRADES

- Bell UH-1H/205, 212, 412
- Black Hawk
- Mi-24/35
- Mi-8/17
- Apache
- CH-53
- Ka-32
- ALH

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Colombia Air Force Upgrade

- Provided to customer with 8000 hours flight potential on body, systems
- Full wiring replacement Other systems as required
- Updated Avionics & Sensors designed in 2010

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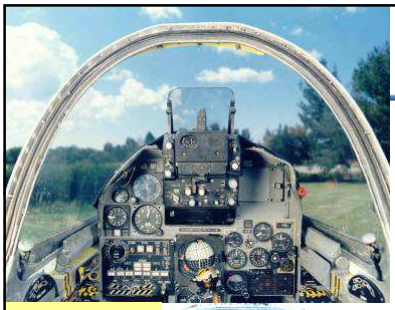
Colombia Air Force Upgrade

- 24 Aircraft
- 80-120% of 4th Gen. A/C (such as F16 block 52, Eurofighter, Rafal, MIG-29) capabilities
- Development, Integration of new armaments, sensors, 100 flight tests
- 3 years – full delivery !
- Operational



F-16A

Kfir C-2

Kfir C-7

F-16C

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Kfir Block 60

F-16 I

Similar Capabilities

1/3 in procurement and maintenance prices!!

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KFIR block 60 Highlights

- Supersonic, MACH 2+ Fighter aircraft
- High maneuverability, Multi-Role
- Beyond Visual Range (BVR) capabilities in A/A and A/G
- Impressive carriage capability, 9 stations for operational flexibility
  - Efficient fuel/armament mix
  - Wide range of weapons compatibility & 5.5 Tons Payload
  - Targeting Pod
- Aerial refueling for extended missions
- Glass Cokpit

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KFIR block 60 Carrying Capabilities

5.5 tons

9 Station

30mm guns

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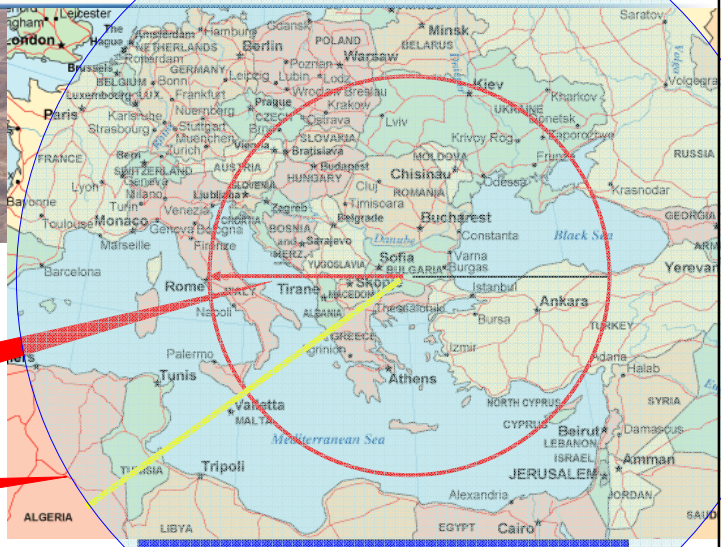
Ground Attack operational radius



KFIR
540 NM
1000 Km

1 Air refuel
1100 NM

High profile Air to Ground mission with 3 Fuel Tanks 4 x 250Kg bombs

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KFIR block 60

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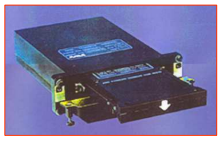
KFIR Block 60

- State of the art Avionics, Radar, weapons
- Open architecture – Customization, adaptation
- Advanced Multi role operational results:
  - All weather, Day & Night, Long-range, air refueling capability, precision
  - A/A, A/G, A/Sea missions
  - Intelligence & surveillance

KFIR AVIONICS SUBSYSTEMS

- Accurate Navigation & Weapon Delivery
- EGI- Embedded GPS/INS
- Multi Function Color Display (MFCD)
- Up Front Control Panel (UFCP)
- Head Up Display (HUD)
- Mission and Display Processor (MDP)



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IAI Radar and DL operational enhancements

- Tactical Situation Display (TSD)
- Missiles and sensor slaving

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Kfir Block 60 Advanced Multi Role Fighter

Movie

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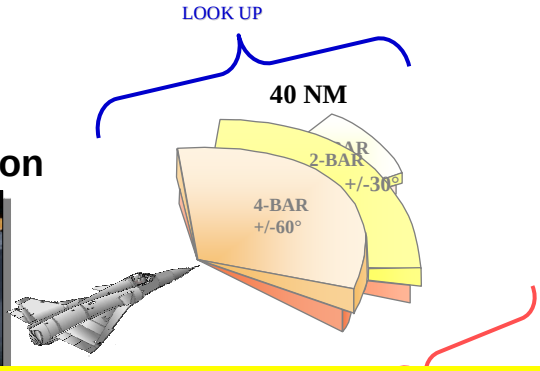
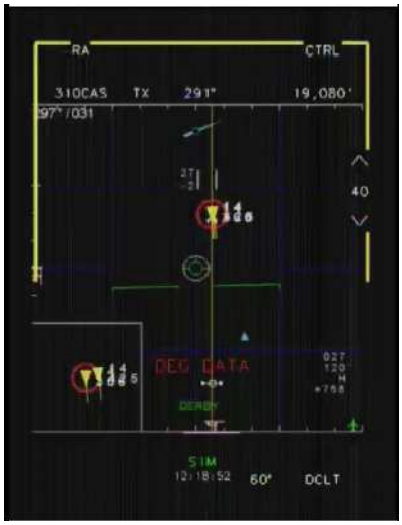
KFIR block 60 Radar

- Multi-Role Fire Control Radar (EL 2032)
- All Weather/Day Night Detection & Identification



- The combat edge comes from systems & weapons
- First to "see" in A/C systems, First to shoot, First to kill
- Platform should have: Reliability, Range, Load, Modern Systems

Air Air Radar



Up to 64 Tgts with elevation, Velocity and vector in TWS

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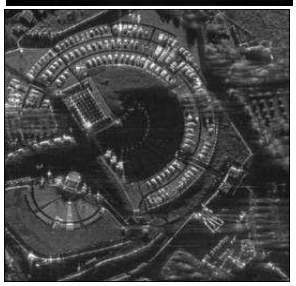
A/G High Resolution SAR Radar

Optical Sensor image



A/G High Resolution SAR Radar images

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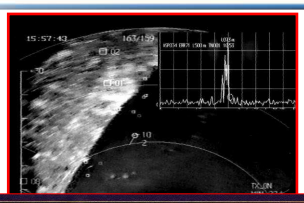
SEA TWS, RS & ISAR



ISAR

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Operational Example Border/Sea Control

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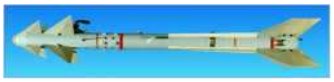
Kfir Block 60 Air to Air Weapon capabilities

- **Latest generation Air to Air missiles are integrated on the Kfir providing edge advantage in Air Defense**

A/A- Helmet Sight & Display

Short range



- **Python 4/5**
- **Look & Kill**
- **Shoot & Forget**

Long range Derby

- **BVR**
- **Active**

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Kfir Block 60 A/G Weapon capabilities

Targeting Pod

A/G- Autonomous Bombs

JDAM

SPICE

LGB

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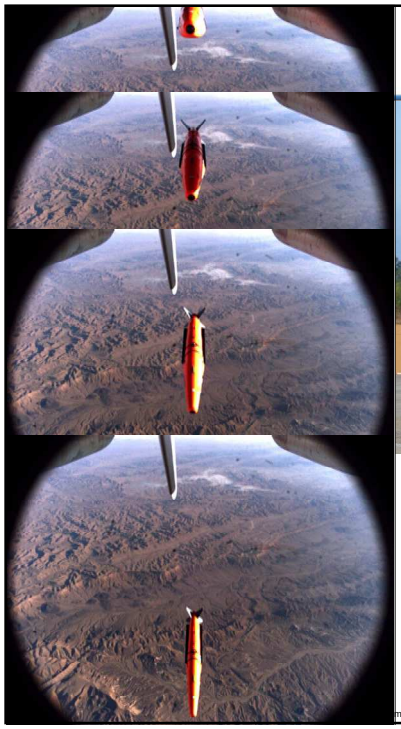

A/G Weapons…

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Operational enhancements

- **Air to Air**
  - **Infra Red & Electro Magnetic (BVR) Missiles**
  - **Easy Acquisition of Targets**
  - **Precise A/A Gunnery**
  - **Head Out Flight**
- **Air to Ground**
  - **Accurate Day/Night Navigation**
  - **Precise Weapon Delivery**
  - **Reduced Pilot Workload**
  - **All Weapons Capability**
  - **All weather**

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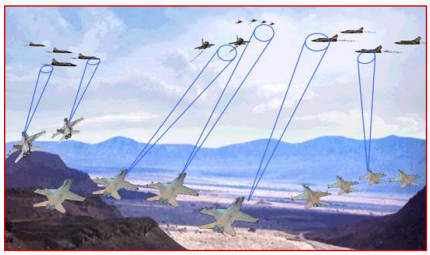
IAI Data Link

- IAI is the sole supplier of Israeli Air Force data link systems for the F-15, F-16, F-35
- More then 18 years data link proven experience
- International proven datalink programs
- **Link 16 integration capability**



Hundreds flying DATA LINK Systems

KFIR Maintenance Concept

- Low maintenance costs and high aircraft availability
- Western Maintenance concept Highly reliable systems
  - Turn around time 30 min.
  - No body & wing cracks for 8000 h
  - Engine 8000 hours life span
  - Unlimited number of Overhauls

30 years flight Potential

Guaranteed Long Term Support

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Support by Original Manufacturer

- IAI is the original manufacturer of the Kfir with established efficient support for all operational and logistic needs
  - Spare Parts
  - Support Equipment
  - Repair Services
  - Technical Assistance
  - Training
  - Documentation
  - Maintenance knowledge transfer
  - Long term Integrated Logistics support by manufacture (IAI)

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Advanced relaiable Affordable Fighter

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Kfir Block 60 Advanced Multi Role Fighter

- Easy to operate, and superb results
  - Full glass cockpit
  - Man Machine interface
  - IAF pilots design
  - Integration =

    S Y M P H O N Y
- Advanced Sensors
- IAI/Elta Powerful Radar
- Advanced DL & ECM

80 - 120 % of 4th gen * aircraft

FIRST TO "SEE", FIRST TO SHOOT, FIRST TO KILL

* 4th Generation aircraft – F16 blocks 40- 52, Rafal, Eurofighter

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O.A2 Single engine

Oren Aviram, 09/06/2011

Kfir Block 60

- EASA Radar
- Fully NATO compatible
- Link 16
- BVR and 5th Gen IR (Piton 5) missiles
- A/G – LGB, GPS guided, Autonomus TV guided
- Full glass cockpit
- Short delivery
- RFP's – Similar results - **At a 1/3 of the price**

Enhanced Capabilities, Cost Effective Solution

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IAI F-16 CAPABILITIES

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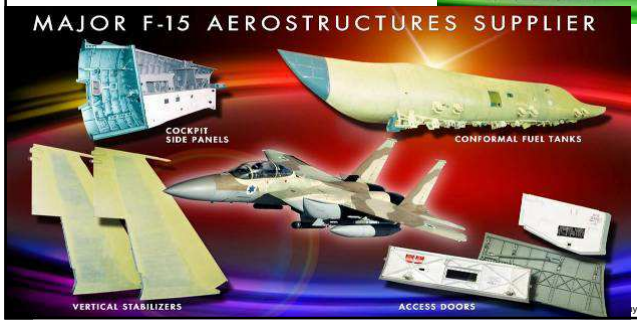
AEROSTRUCTURES /BUILD TO SPEC / ELECTRICAL HARNESSES

- Sole source for major F-16 & F-15 Aerostructures
- Boeing preferred supplier



- USAF F15 rewiring
- *New!* T38 wings
- *New!* F-35 wings

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F-16 A/B/C/D Falcon Up Star & Slip

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FAC KFIR C-10
Advanced Multi-role Fighter
Red Flag 2012

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Colombian Air Force Kfirs in Red Flag

✓ Independent deployment

2000 Miles

130 people

8 Kfir MRF

Refueling

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Red Flag

Red Flag

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Red Flag

Red Flag

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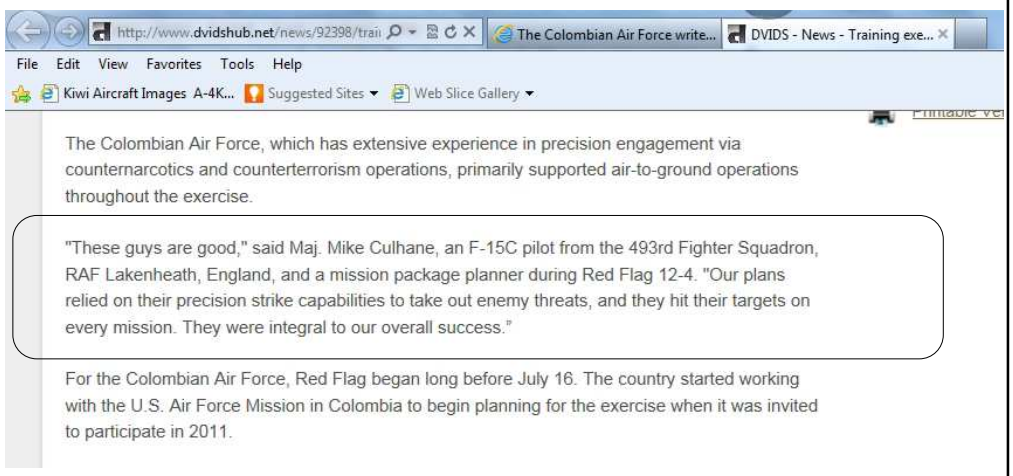
Kevin Jackson

Red Flag

Red Flag

About Us
Air Culture
Air Information
Communication Medium
Human Rights
Our friends write...
Personnel Recovering National Center
Strategic Planning
Personalize
Additions
Aerospace Museum
FAQ
The Air Force´s Second Commander in Red Flag 2012
July 17, 2012
Coronel Liliana Alarcón Guarín
Major-General Mr. Flavio Ulloa Echeverry, Second Commander and Major State´s Chef from the Colombian Air Force, travelled to the Air Base in Nellis-Arizona, in order to verify, supervise, and accompany every aspect related to the Institution´s participation in Red Flag´s exercise.
At the same time, in the ramp of Nellis Air Base, they took off 48 airplanes belonging to the Arab Emirates, United States and Colombia, between we find F16 airplanes, F15, A10 c, among others.
These type of missions, simulate a regular war scene between two sides, named Packet Attack, that is guided against land objectives, that is made between the coalition among several countries and an enemy one.

Red Flag


The Colombian Air Force write...
DVIDS - News - Training exe...
File Edit View Favorites Tools Help
Kiwi Aircraft Images A-4K...
Suggested Sites
Web Slice Gallery
The Colombian Air Force, which has extensive experience in precision engagement via counternarcotics and counterterrorism operations, primarily supported air-to-ground operations throughout the exercise.
"These guys are good," said Maj. Mike Culhane, an F-15C pilot from the 493rd Fighter Squadron, RAF Lakenheath, England, and a mission package planner during Red Flag 12-4. "Our plans relied on their precision strike capabilities to take out enemy threats, and they hit their targets on every mission. They were integral to our overall success."
For the Colombian Air Force, Red Flag began long before July 16. The country started working with the U.S. Air Force Mission in Colombia to begin planning for the exercise when it was invited to participate in 2011.

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Thank You !

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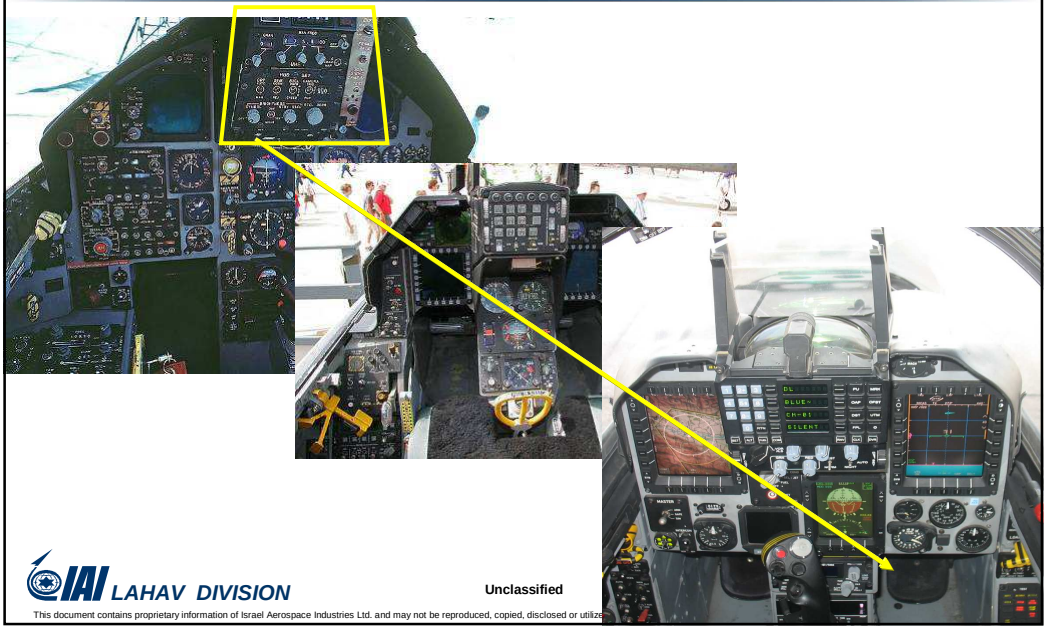
Up Front Control generations



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Up Front Control Display (UFCD)

- THE NEED and benefits -

  Improved systems operation and flight Safety
- **Unique product** combining UFC + Display + Computer + HMI
- Optimal display location in cockpit (centric, high)
- Crucial tactical flight data in **center of pilot's attention**
- Pilot workload reduction, Improved & enhanced pilot SA

- The UFCD is FFF tested for F15 A/B/C/D cockpit by end user

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